A NEW MURINE GENUS AND SPECIES FROM SIND, WITH DIAGNOSES OF THREE OTHER NEW GENERA BASED ON PREVIOUSLY KNOWN SPECIES OF "MUS."

BY

OLDFIELD THOMAS, F. R. S., BRITISH MUSEUM.

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I owe to the kindness of Mr. R. C. Wroughton the opportunity of examining and describing a highly interesting mouse obtained in Sind by Mr. E. Priestley for the Natural History Society of Bombay, and now presented by the Society to the British Museum.

Mr. Wroughton has himself given a note on the other species obtained by Mr. Priestley, among which is a *Leggada* so like the new species as to be readily mistaken for it.

PYROMYS, g.n.

External proportions about as in Leggada platythrix. Fur profusely mixed with spines, but not, as in Acomys, wholly spinous. Ears rather small. Thumb with a small triangular nail, other digits with normal sized claws; soles naked, smooth; pads six in number, large, rounded, the last one not elongated. Fifth hind toe long, reaching nearly to end of the first phalanx of the fourth. Mammæ 4-2=12.

Skull strongly bowed, its profile convex above. Supra-orbital ridges broad and strongly developed, but disappearing posteriorly half way across the parietals, the interorbital space narrow anteriorly, rapidly broadened posteriorly. Anterior palatine foramina very long, extending to level of the anterior internal root of m^1 ; posterior palatine foramina also long, extending from the level of the hinder cusp of m^1 to the front cusp of m^3 . Posterior palate continued backward some way behind m^3 , the narial opening narrowed, and the middle part of the palatal edge thickened into a median palatal spine. Bullæ unusually large.

Incisors normal, their edge not notched. Molars of the same

general type as in Acomys, not hypsodont as in the more typical Epimys, and m^1 not disproportionally large as in Mus and Leggada. But their pattern is more zigzagged, so as to look more complicated, though the size, number and position of the cusps is the same. Antero-internal cusp of m^2 very large, antero-external very small. M^3 well developed, with three distinct cusps on its inner edge.

Type.—Pyromys priestleyi, sp. n.

The most striking point about this genus is its unique mammary formula, no other known Murine having four pectoral pairs.

PYROMYS PRIESTLEYI, sp. n.

General external appearance almost exactly as in Leggada platy-thrix sadhu, brought from the same locality. Fur thickly mixed with spines, those of back about 6 mm. in length. General colour above, uniform pale grey ("drab-grey") without any buffy suffusion. Under surface white, the hairs and spines white to their roots; line of demarcation well defined. Face like back. Ears short, greyish-brown. Fore limbs, from elbows downwards, and hands white. Hind limbs greyish externally to ankles; feet white. Soles naked, pads large and rounded; fifth hind toe, without claw, reaching to middle or end of the first phalanx of the fourth. Tail shorter than head and body, well haired; pale greyish above, white below, not shapely defined; scales small, about 16-18 to the centimeter.

Skull and teeth as described above.

Dimensions of the type, measured in the flesh:—Head and body 98; tail 73; hindfoot 16; ear 13.

Skull.—Greatest length 26·2; basilar length 21; zygomatic breadth 12·3; nasals 10; interorbital breadth 3·5; breadth of brain case 11; palatilar length 12·5; diastema 7·6; anterior palatal foramina 6; posterior palatal foramina 1·9; length of upper molar series 4·3.

Habitat.—Virawah, Thar and Parkar, Southern Sind.

Type.—Adult female. B. M. No. 11, 3, 13, 9. Collected 25th September 1910, and presented by Mr. E. Priestley, D. S. P., through the Bombay Natural History Society.

This most interesting species, which I have named in honour of its captor, is remarkable for its striking resemblance to the local race of Leggada platythrix, an example of which was taken at the same time and place by Mr. Priestley. Before their skulls were examined, the two animals would have been supposed to belong to one species, had it not been that the unusual mammary formula of the Pyromys showed clearly on the skin.

In working out the generic position of this pecular animal it has become evident that, although the unwieldy genus *Epimys* cannot yet be satisfactorily broken up into natural groups, certain peripheral species may, as a preliminary, be separated from it. Such are the species that have been called "Mus" mettada, (more strictly meltada) gleadowi and humei, no one of which should be in a genus whose type is so essentially different an animal as the Black Rat (*Epimys rattus*, L.)

The following are the chief characters of the groups I propose to form:—

MILLARDIA,* g. n.

Sole pads 4 or 5, the fifth pad of *Epimys* always, and the sixth generally, suppressed. Fifth hind toe short, not reaching to base of fourth. Tail of medium length. Mammæ 2—2—8.

Skull generally as in Epimys. Palatal foramina very long. Posterior nasal opening of average breadth, close behind m^a .

Molars decidedly brachyodont, broad.

Type.—Millardia meltada (Golunda meltada, Gray. Mus mettada auct.) Other species, listoni, Wrought, and comberi, Wrought.

The most essential character of this genus is the suppression, total or partial, of the posterior sole pads, the structure of the posterior palatal regions remaining still as in *Epimys*.

GRYPOMYS, g. n.

Sole pads four only, the fifth and sixth suppressed. Fifth hind toe short, not reaching to base of fourth. Tail rather short. Mammæ 1—2=6.

^{*} Named in honour of Mr. W. S. Millard, to whose enthusiastic help, in connection with the Bombay Natural History Society, so much of the recent progress of Indian Zoology is due.

Skull very much as in *Pyromys* above described. Upper profile bowed. Supra-orbital ridges well developed. Posterior nares narrowed, the opening some way behind molars. Bullæ large.

Teeth as in Pyromys.

Type.—Grypomys gleadowi (Mus gleadowi, Murray).

This genus combines the foot structure of *Millardia* with the narrow and produced choanæ of *Pyromys*. A new born specimen even of *G. gleadowi* shows no trace of the fifth and sixth foot pads.

It may be noted that these three allied genera may be distinguished from each other by the number of their mammæ alone, these being in Pyromys 4—2=12 (i.e., four pectoral and two inguinal pairs), Millardia 2—2=8, and Grypomys 1—2=6. True Mus, in the modern sense, containing the Mus musculus group, and Leggada, have 3—2=10. In Epimys the number varies from 1—2=6 to 3—3=12 but the anterior are never more numerous than the posterior. In the one Indian species of Apodemus (A. arianus) the number is 1—2=6. Vandeleuria, Golunda and Hadromys all have 2—2=8.

HADROMYS, g. n.

General appearance as in *Golunda*. Form stout. Tail rather short. Sole pads six. Fifth fore toe very short; fifth hind toe reaching just to base of fourth. Mammæ 2—2=8.

Skull shaped almost exactly as in *Golunda*, with the same short muzzle and well marked supra-orbital and parietal ridges. The anterior edge of the zygomatic plate is however concave, and the posterior palate ends behind the last molar.

Incisors very broad and heavy. Molars wholly unlike those of *Golunda*, more like those of *Epimys*, rather hypsodont, with lamminæ well defined. No unworn specimens are however available for examination.

Type.—Hadromys humei (Mus humei, Thos.*)

The wide difference of "Mus humei" from every other murine has long been evident, and its distinction as a special genus is now obviously called for. Its resemblance, both external and cranial, to Golunda is very striking.

^{*} Described in detail, P. Z. S., 1886, p. 63.